

Public Health Bulletin

A Publication of the Public Health Department, Gregory Thomas, M.D., Director • www.slopublichealth.org 2191 Johnson Avenue • P.O. Box 1489 • San Luis Obispo, CA 93406 • (805) 781-5500 • (805) 781-5543 fax

Gregory Thomas, M.D., M.P.H.



Health Director Notes...

Reporting Suspected West Nile Virus (WNV) Infection

Effective immediately, WNV infection is reportable within San Luis Obispo County by authority of the Health Officer under California Code of Regulations, Title 17 Section 2511. Physicians and laboratories must report all positive WNV tests to the Public Health Department.

Persons with positive WNV tests must be reported within one working day via the standard Confidential Morbidity Report (CMR) form and faxed to the Public Health Department at 781-5543. The CMR form is available at: www.slopublichealth.org/ contact/forms.htm. For questions during business hours, call the Communicable Disease Prevention and Control Program at 781-5500. Urgent questions after hours may be referred to County Communications at 781-4550 -request the Health Officer.

Family Care Center

In June, the County Family Care Center closed and Community Health Centers of the Central Coast (CHC) assumed responsibility for their 40,000 annual visits.

continued on page 2 12 12 12

Program Helps HIV-Positive Disclose Status to Partners

When someone tests positive for HIV, the most important way to reduce further transmission of the virus is to make sure that sexual and needle sharing partners of the infected individual learn of their exposure. The Public Health Department can assist both physicians and HIV-positive people with this process, without charge, and in a confidential way.

While there are many reasons why someone with HIV would not want to disclose to a partner, studies suggest that 15% to 45% of partners of HIV-positive people test positive for the virus. Partners of HIV-positive people are at the highest risk for contracting HIV; however, half of them are unaware that they are infected.

To combat this problem, San Luis Obispo County offers assistance to people in disclosing to their sexual and needle sharing partners that they have been exposed to HIV. This program is known as Partner Notification and Referral Service.

A study cited by the California Department of Health Services found that, when offered assistance in disclosing HIV status to partners, 85% of HIV-positive people accepted the service, allowing their health care provider, local health department staff person or counselor to either inform partners directly or counsel them in how to inform them about their status.

If you have patients with AIDS or HIV, or you know someone who has tested positive and they need help notifying sexual or needle sharing partners so they can get tested, call the Public Health Department at 788-2906 or the AIDS Support Network at 781-3660. The service is available both to physicians and HIV-positive people seeking confidential assistance in partner notification. Counselors will gather the contact and descriptive information required to notify partners. Counselors will also discuss with the HIV-positive person whether they would like to continued on page 2 states

Highlights in this Issue:

Study Outlines Unseen Dangers of Secondhand Smoke	2
Barriers to Treatment Adherence by Homeless	3
Substance Abuse Screening for Pregnant Women	3
Communicable Disease Table	4
DEET: It Can't Be Beat	Inse
The 5 D's of Mosquito Defense	Inse

HIV-Positive (cont.)

disclose the transmission risk themselves or if they would like the Public Health Department to contact and notify the partners confidentially. If either the physician or patient prefers the second option, the Public Health Department will notify partners regarding their exposure without using the HIV-positive person's name.

State regulation allows physicians to notify partners without consent of the infected individual; however, several steps are necessary to make sure this process is confidential.

Health Officer (cont.)

CHC has expanded visits (10,000), expanded weekday hours (10 hours after 5 p.m. in each clinic region) and expanded weekend hours (eight weekend hours in the north, south, and central portions and at least four weekend hours on the north coast).

County radiology, cardiopulmonary, and pharmacy services will also be assumed by CHC. The clinical lab will continue to be operated by the County under the Public Health Department.

The agreement and contract were developed during months of discussion and negotiation to assure access and quality are clearly demonstrated.

A sliding fee scale will continue to be available for low-income patients not eligible for other health coverage.

For more information, call me at 781-5519, Contract Manager Marsha Bollinger at 781-4200, or Ron Castle or Sophia Sosa at CHC at 929-3211.

New Study Outlines Unseen Dangers of Secondhand Smoke

Households contaminated by environmental tobacco smoke could result in 'passive smoking' for young children and increase exposure, according to research co-written by San Diego State University Psychology Professor Georg Matt. Over several weeks, this can expose children to levels of contaminants from secondhand tobacco smoke that are "equivalent to several hours of active adult smoking," says the study as published in *Tobacco Control*, a publication for tobacco research distributed by the *British Medical Journal*.

The research also questions the idea that smoking outdoors will fully protect children from the harmful effects of tobacco smoke. The authors compared 49 homes with children between 2 and 12 months old. Fifteen of the homes were occupied by non-smokers. Of the remaining 34 homes, 17 were occupied by smokers who attempted to protect their children by smoking outdoors and 17 were occupied by smokers who made no such attempts.

The researchers collected dust and surface wipe samples from the living room and the child's bedroom in each of the homes. They also took urine and hair samples from the child and placed a nicotine monitor in the living room and the child's bedroom.

The mothers were asked about the number of smoking and nonsmoking visitors to the home and were asked to record daily the whereabouts and activities of their children. Levels of secondhand tobacco contaminants in the dust, air and surface samples from homes where smokers attempted to protect their children by smoking outdoors were up to seven times as high as those in homes whose owners did not smoke themselves.

Levels of tobacco contaminants in the homes of smokers who regularly smoked indoors were up to eight times higher than those where smokers went outdoors to smoke. The level of contaminants in homes of indoor smokers was up to 56 times higher than in the homes of non- smokers.

The components of cigarette smoke rapidly disperse and undergo further chemical changes, allowing them to be absorbed into the walls, floors, furniture, clothes, toys, and other household surfaces within minutes to hours after emission, say the authors. From there they can be re-cycled into the air over the course of hours or months, providing ongoing reservoirs of contamination.

Infants, in particular, are at risk because during the first year of life they spend a great deal of time indoors close to contaminated sources. Although the absolute levels of exposure are low, compared with active adult smoking, over the course of weeks, the exposure is cumulative, say the authors.

To view an abstract of this article go to http://tc.bmjjournals.com. To view the paper in full you must subscribe to TC Tobacco Online.

Treatment Adherence by Homeless Hurt by Transportation Difficulties

Homeless persons experience a higher rate of chronic diseases, health care utilization, and death rates than the general population. Lack of access to the protective effects of steady housing, transportation, and health care contributes to their compromised state of health. When health care is received, many are unable to benefit from the medical intervention for a myriad of reasons.

San Luis Obispo County sheltered and non-sheltered homeless individuals (N=20) were studied this year to determine adherence to treatment recommendations. Sheltered subjects were randomly sampled and non-sheltered subjects convenience sampled. The researcher used the Mini Mental State Examination as a cognitive screening tool and conducted face-to-face interviews using forced choice questions.

Demographics of the study participants included mostly men (80%), Caucasian (80%), and homeless for less than six months (45%). The most frequently reported medical insurance coverage was Medi-Cal (30%) and no insurance (30%). Most individuals (55%) had seen their medical provider within the last 30 days and the most frequent presenting problem was for treatment of trauma. Forty percent of homeless subjects reported having been diagnosed with a chronic disease.

Sixty-five percent of subjects were unable to adhere to recommended treatment. Transportation difficulties (30.8%) were the most frequent barrier to adherence, followed by diet difficulties (15.4%) and no means to elevate an extremity (15.4%). Negative influences on adherence ability included non-shelter status, walking or bicycling as transportation means, chronic diagnosis, and carrying Medi-Cal or no insurance.

The study was limited by the small number of subjects, limited time to access the "hidden homeless," and a monolingual English speaking researcher.

Intervention programs designed to increase adherence need to be developed. Recommendations include medical case management for homeless individuals and promoting clearer communication between patient and medical provider regarding the limited resources available to homeless individuals.

-Katie Dolezal, RN, PHN

Substance Abuse Screening for Pregnant Women

Over the last year, San Luis Obispo County Perinatal Substance Abuse Task Force and the Perinatal Substance Abuse Leadership Team have been working with local obstetricians to encourage screening all pregnant women for the use of tobacco, alcohol and drugs during pregnancy.

The consortium has successfully implemented an assessment program with several of the physicians and has been educating other professional and community members regarding substance abuse during pregnancy.

The consortium is now ready to begin the second step in addressing perinatal substance abuse by providing intervention for the children perinatally exposed to alcohol, drugs and tobacco.

In September 2004, a team of local leaders will meet to develop a strategic plan under the guidance of Dr. Ira Chasnoff and Dr. Rich McGourty. The goal is to establish a Children's Center which will provide assessment and treatment for affected children. For more information, contact Jan Campbell at 781-5500, ext 5592.

Tobacco Facts

Tobacco use remains the leading preventable cause of death in the United States, causing more than 440,000 deaths each year and resulting in an annual cost of more than \$75 billion in direct medical costs. Smoking accounts for more than 5.6 million years of potential life lost each year nationally.

San Luis Obispo County Reported Cases of Selected Communicable Diseases - Summer 2004

Disease	Jan-Mar	April	May	June	Total 2004	Total 2003
AIDS	0	0	0	0	0	6
Amebiasis	0	0	0	1	1	1
Campylobacter	11	2	1	10	24	30
Chlamydia	116	38	47	33	234	492
Coccidioidomycosis	27	6	2	2	37	71
Cryptosporidiosis	3	0	0	2	5	8
E. Coli 0157:H7	0	0	0	0	0	1
Giardia	1	0	0	1	2	12
PPNG	0	0	0	0	0	0
Gonorrhea	11	5	6	0	22	56
Hepatitis A	1	0	0	0	1	4
Hepatitis B	5	0	0	0	5	1
Hepatitis C Acute	0	0	0	0	0	0
Hepatitis C Chronic	114	20	25	26	185	594
Hepatitis, Unspecified	0	0	0	0	0	0
Measles (Rubeola)	0	0	0	0	0	0
Meningitis - Total	11	0	3	2	16	34
Meningitis - Viral	7	0	3	2	12	28
Meningitis, H-Flu	0	0	0	0	0	0
Meningococcal Disease	0	0	0	0	0	1
Pertussis	0	0	0	0	0	3
Rubella	0	0	0	0	0	0
Salmonellosis	3	1	0	3	7	11
Shigellosis	1	0	0	0	1	4
Syphilis - Total	5	0	3	1	9	10
Tuberculosis	0	0	0	1	1	8



San Luis Obispo County Public Health Department P.O. Box 1489 San Luis Obispo, CA 93406

DEET: It Can't Be Beat

By Brian Reid Special to The Washington Post Tuesday, May 6, 2003, Page HE08



For all the counting of dead birds, the treating of ponds thick with mosquito larvae and the possibility of widespread spraying, the final line of defense against West Nile remains the human skin. Keep the insects away from that fragile barrier and the risk plunges to zilch.

The scientific consensus of the best way to do that remains clear: In the United States, nothing comes close to DEET. Since the government developed the chemical 50 years ago, it's become the gold standard for keeping all manner of creepy-crawlies at bay. Especially mosquitoes.

In a study published last year in the New England Journal of Medicine, 15 hardy volunteers from the staff at the University of Florida shoved their arms into a cage full of underfed mosquitoes after slathering on one of 13 different kinds of repellents and three repellent wristbands. Four concentrations of DEET were included, as well as four members of the Avon Skin-So-Soft products provided near-100 percent effectiveness for some period of time. But the key difference among the repellents was the length of that effectiveness.

The results were unambiguous. DEET-based products claimed the top three spots, with Deep Woods Off, topping the DEET scale with a concentration of 23.8 percent DEET, keeping the bugs at bay for more than five hours, on average. No citronella product and no version of Skin-So-Soft – including Avon's Bug Guard Plus, with a new bug-repelling chemical, IR3535 – worked for more than an hour.

"I think that if you're looking for the insect repellent that's going to last the longest, you're not going to find many people who will say anything is better than DEET," said Mark Fradin, a dermatologist at the University of North Carolina, who led the New England Journal study.

The study had a few detractors, including Avon, which said the arm-in-a-cage study design was flawed and that the company's own studies showed Bug Guard Plus worked for three hours or more. But Fradin's results match those in May's issue of Consumer Reports. That effort, also a cage test, put eight DEET-based repellents up against Avon's new formulation and, again, every DEET product outlasted Bug Guard Plus.

That's not to say that non-DEET repellents aren't effective. The Environmental Protection Agency (EPA) requires some proof that the stuff will keep the skeeters from biting before it will allow a company to market a bug repellent. Consumer Reports found that benefits of most non-DEET products so limited that it didn't even bother to test them.

The problem, says Andrew Spielman, a professor of tropical public health at the Harvard School of Public Health, is that the protection offered is, at best, "transient."

Spielman said he sticks with the DEET-based products, though he said he uses the repellent cautiously. There are reports of medical problems, including seizures and deaths, linked to large doses of the chemical, though the EPA sees no significant risks from the normal use of the chemical. Still, Spielman advocates prudence.

"Just as a general principle," he said, "one should optimize for the minimum possible use of anything, be it aspirin or DEET. I use it only when I need it."

The American Academy of Pediatrics (AAP) recommends using only products with DEET concentrations of less than 10 percent on children, and pediatricians have recommended avoiding the use of the chemical on children under 2 years old. However those guidelines were put in place in 1999, before West Nile emerged. A pediatrician writing in the APP's house publication suggested that babies older then two months can tolerate products as concentrated as 30 percent DEET without significant risk. Both the AAP and the EPA say the repellents should be kept off little hands and away from mouths and open wounds.

For the youngest babies, mosquito netting is likely to do the trick. For the rest of the population putting a layer of clothing between them and the bloodsuckers might not be worth the discomfort, Fradin said. Nets "are not going to work if the fabric comes in contact with your skin," he said – the mosquitoes will simply bite through the cloth. "And if it's 105 degrees and you're hiking around, it's going to be uncomfortable."

The best protection against West Nile, however, might be to simply avoid the bugs, rather than wage chemical warfare. While the mosquitoes that emerge in the coming months will no doubt be bloodthirsty, Spielman said the West Nile-transmitting insects won't make their appearance until later in the season. A significant population of birds carrying the virus is required to support a number of infected mosquitoes sufficient to increase human risk.

"It's being outside in the garden at midnight late in the transmission season that's the risky situation. The need for protection in midsummer is pretty minimal because transmission is pretty rare," he said.

But it's probably worth slathering up for those harmless early season mosquitoes, anyway, he concedes. "A couple, three weeks from now, we'll be bitten," Spielman said. The pests may not carry disease, but "they are annoying."







Practice the 5 D's of Mosquito Defense

Drain Standing Water

Mosquitoes lay eggs in standing water. Removing sources of pooled water, such as cans, toys, tires, over-watered plant containers, clogged rain gutters, etc. will prevent your property from becoming a breeding ground.

Dusk & Dawn

At Dusk and Dawn avoid going to areas where mosquitoes are likely to be actively biting. Keep mosquitoes out of the house day & night by screening windows and doors.

DEET Can't be Beat!

Use Mosquito repellants containing the ingredient **DEET** per label instructions when in areas where mosquitoes are active.

Dress to Shield

Wear long sleeves and pants, especially in the early morning and at sunset - - - cover skin so they don't get in!

There's one more **D** to remember:.. **D**etection, be sure to report dead birds to the West Nile Virus Helpline: **1-877-WNV-Bird** For further information call Environmental Health Services at 781-5544 or visit **www.slopublichealth.org** and click on West Nile Virus.